

CLAIMS

What is claimed is:

- 1 1. In a data processing system having a cache, a method for generating uncached objects comprising:
 - 3 (a) locating at least one component that is related to an uncached object; and
 - 4 (b) constructing, by the cache, the uncached object from the located at least one component.
- 1 2. The method of claim 1 wherein step b further comprises obtaining the located at least one component.
- 1 3. The method of claim 1 further comprising obtaining the at least one component from the cache and a second component from a storage system.
- 1 4. The method of claim 1 further comprising obtaining the at least one component and the second components from a storage system.
- 1 5. The method of claim 1 further comprising deriving the at least one component from an object.
- 1 6. The method of claim 1 further comprising storing the constructed object in the cache.
- 1 7. The method of claim 1 further comprising generating, by the cache, a request for the object.
- 1 8. The method of claim 1 wherein the object is an image file.
- 1 9. The method of claim 8 wherein the image file is a JPEG-2000 file.
- 1 10. The method of claim 1 wherein the at least one component is an image file.
- 1 11. The method of claim 10 wherein the image file is a JPEG-2000 file.
- 1 12. The method of claim 1 wherein the object is a web page.

1 13. The method of claim 1 wherein the at least one component is a web page.

1 14. The method of claim 1 wherein the object is a document.

1 15. The method of claim 1 wherein the at least one component is a document.

1 16. A cache system comprising:

2 a cache memory storing one or more objects;

3 logic element determining that an object is missing from the memory; and

4 a processor obtaining at least one component related to the missing object and

5 constructing the object in response to the logic element determining that the

6 object is missing from the cache memory.

1 17. The cache system of claim 16 wherein obtaining the at least one component further

2 comprises obtaining the at least one component from an object.

1 18. The cache system of claim 16 wherein the object is an image file.

1 19. The cache system of claim 18 wherein the image file is a JPEG-2000 file.

1 20. The cache system of claim 16 wherein the component is an image file.

1 21. The cache system of claim 20 wherein the image file is a JPEG-2000 file.

1 22. The cache system of claim 16 wherein the object is a web page.

1 23. The cache system of claim 16 wherein the component is a web page.

1 24. The cache system of claim 16 wherein the object is a document.

1 25. The cache system of claim 16 wherein the component is a document.

1 26. The cache system of claim 16 wherein a request is generated by the cache system.

1 27. The cache system of claim 16 wherein the cache system is a server.

1 28. The cache system of claim 27 wherein the request is generated by a client.

1 29. The cache system of claim 16 wherein the logic element determining the requested
2 object is missing from the cache memory:
3 (a) further determining if the components to construct the requested object are
4 in the cache memory; and
5 (b) further determining the components missing from the cache memory
6 required from the storage device to construct the object.

1 30. The cache system of claim 29 wherein the cache system is generating the request for
2 an object.

1 31. In an image server having a cache, a method for obtaining an image comprising:
2 (a) obtaining the image from the cache, if the image is present within the
3 cache, otherwise,
4 (b) constructing the image from one or more cached image components, if the
5 cache has one or more cached image components from which the image
6 can be produced, otherwise,
7 (c) determining whether to construct the image using an uncached image
8 component stored in a remote storage.

1 32. The method of claim 31 further comprising constructing the image from the uncached
2 image component stored in remote storage and one or more cached image
3 components, upon determining to construct the image using the uncached image
4 component.

1 33. The method of claim 31 further comprising constructing the image from the remote
2 stored image component upon determining to construct the image using the uncached
3 image component stored in the remote storage.

1 34. The method of claim 31, further comprising obtaining the image from the remote
2 storage if it is determined not to construct the image.

- 1 35. The method of claim 31 wherein the image is a JPEG 2000 image.
- 1 36. In an image server having a cache, a method for obtaining an image comprising
2 obtaining the image from the cache, if the image is present within the cache,
3 otherwise constructing the image from image components obtained from one of the
4 cache only, remote storage only, and a combination of the cache and the remote
5 storage.
- 1 37. The method of claim 36 wherein the image is a compressed image.

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